

ABSTRACT

An object of the present invention is to eliminate color non-uniformity and intensity non-uniformity on a three-dimensional image. The present invention provides a three-dimensional display comprising: a two-dimensional display, which comprises a plurality of color subpixels arranged in rows extending in a horizontal direction and in columns extending in a vertical direction which is substantially perpendicular to the horizontal direction, the color subpixels of red, green and blue being arranged periodically in the rows and the color subpixels of the same color being arranged in the columns; and a lenticular sheet provided on the two-dimensional display and having a plurality of cylindrical lenses through which the color subpixels are viewed and which extend in parallel with one another, the central axis of each cylindrical lens being inclined at an angle of θ to the column of the two-dimensional display, wherein, when a pitch of the color subpixels in the horizontal direction is p_x , a pitch of the color subpixels in the vertical direction is p_y , and a color subpixel group constituting one three-dimensional pixel is constituted by $3M \times N$ number of color subpixels where $3M$ is the number of color subpixels in each row of one of the cylindrical lenses and N is the number of color subpixels in each column of one of the cylindrical lenses, a relationship, $\theta = \tan^{-1} (3p_x/NP_y)$, is satisfied.